## Biochemical Validation of the National Youth Tobacco Surveys

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## Abstract

The National Youth Tobacco Survey (NYTS) is an anonymous, self-administered survey of tobacco attitudes, knowledge, beliefs, and behaviors. The survey is administered in school. The NYTS was fielded in 2000 and it will be fielded again in 2002. Although primarily a national public health surveillance tool, the NYTS will also be used to assess changes in attitudes and behaviors about tobacco as a result of the truth<sup>sm</sup> anti-tobacco media campaign funded by the American Legacy Foundation. The study reported herein is a pilot for a larger biochemical validation study of the NYTS. The pilot study was carried out in May 2000.

We recruited two middle schools and two high schools for the pilot. All are located in North Carolina. Students were in grades 6, 8, 10, and 12. The self-administered questionnaire included 69 questions. Using cotton swabs, saliva was collected after students had completed the paper and pencil questionnaire. Cotton swabs were assayed for cotinine.

A total of 771 students completed the paper and pencil questionnaire and contributed a sufficient quantity of saliva for assay. Overall, 15.1% of respondents self-reported smoking within the 3 days preceding survey. Of those self-reporting no-smoking, 3.2% tested positive for cotinine. Rates of under-reporting were higher for high school than for middle school youth. African American youth under-reported at higher rates than white youth. Males under-reported at higher rates than females. This pilot study demonstrated that collection of saliva for biochemical validation of self-reported smoking is possible in a classroom setting and that there was substantial under-reporting of past 3-day smoking.